

IN THE CLAIMS:

Please CANCEL claims 4-11 and 13 in accordance with the following:

1. (PREVIOUSLY PRESENTED) A joint structure of a robot, comprising:

a speed reducer;

a first member;

a second member connected to the first member through the speed reducer to rotate relative to the first member; and

a motor having a shaft, the motor to drive the second member to rotate relative to the first member, wherein

the speed reducer includes a first-stage speed reducing mechanism and a second-stage speed reducing mechanism,

the first-stage speed reducing mechanism includes an input gear connected directly to the shaft of the motor and spaced from a center of rotation of the speed reducer, a single spur gear in mesh with the input gear,

the second-stage speed reducing mechanism includes a crankshaft connected directly to the spur gear, an external gear which engages the crankshaft to be rocked eccentrically, a casing of the speed reducer, an internal gear which is formed inside the casing and is in mesh with the external gear, and a rotating member which supports the crankshaft for rotation and can rotate around the central axis of the internal gear with respect to the casing,

the casing of the second-stage speed reducing mechanism is attached to the first member,

the second member is attached to the rotating member of the second-stage speed reducing mechanism, and

the motor is attached to the second member, with the shaft of the motor shifted with respect to a center of rotation of the rotating member of the speed reducer, so that the input gear of the motor is in mesh with the spur gear of the first-stage speed reducing mechanism, the rotating member defining a through hole passing therethrough, the center of rotation of the rotating member being within the through hole.

2. (PREVIOUSLY PRESENTED) The joint structure of a robot according to claim 1, wherein said second member comprises a mounting portion to mount the motor in a given position and is attached to the rotating member axis of the output of the speed reducer, and said second member and said rotating member are configured such that the rotational phase of the second member are configured such that the rotational phase of the second member with respect to the rotating member is settled using a positioning pin when attaching the second member to the rotating member.

3. (PREVIOUSLY PRESENTED) The joint structure of a robot according to claim 1, further comprising wiring or piping, wherein said first and second members of the robot have a hollow structure inside, and said casing defines a through hole passing therethrough and has a common axis with the through hole of the rotating member so that the wiring or piping is secured inside the joint.

4-11. (CANCELLED)

12. (PREVIOUSLY PRESENTED) The joint structure of a robot according to claim 1, wherein the second member supports the crankshaft.

13. (CANCELLED)